

## **Piecing Together the Crazy Quilt of Prenatal Care**

**MAGGI MACHALA, BSN, RN  
MARGARET W. MINER, PhD**

Ms. Machala is Pregnancy Program Coordinator for Public Health District V, South Central Idaho. Dr. Miner is Assistant Research Professor in the Management Department of the University of Utah Graduate School of Business.

Frederick Herzberg, PhD, MPH, consulted on the job design for this project.

Tearsheet requests to Dr. Miner at BuO 208, University of Utah, Salt Lake City, UT 84112.

### **Synopsis** .....

*The failure to provide adequate prenatal care for low-income pregnant women in the United States and the effects of this failure on infant mortality are well known. Many studies have identified institutional barriers against access to care as a major cause.*

*To overcome these barriers, Public Health District V, South Central Idaho, has created a comprehensive prenatal health care model that has almost tripled participation in its program during the first year of implementation and increased it again significantly during the second year. This decentralized pregnancy program has succeeded in getting all of the physicians offering obstetrical care in the district to serve low-income pregnant clients on a rotating basis.*

*The new program provides pregnancy testing as well as financial screening services. Also, it has combined support services into one-stop-shopping clinics that include an innovative expansion of the Women, Infants and Children (WIC) Program of the U. S. Department of Agriculture. WIC food vouchers help attract clients into the prenatal care system and keep them coming. Enrichment of the duties of the public health nurse provides case coordination that pulls together the patchwork of medical and support services for the pregnant client.*

---

**T**O GET PRENATAL CARE in the United States, low-income women must struggle with a crazy quilt of multiple programs from different funding sources, each with different eligibility criteria, processes, and regulations that confound and confuse their efforts and those of hands-on health care providers. How can we wonder that low-income pregnant women fail to gain access to these programs, and that, as a consequence, infant mortality in the United States remains high (1,2)?

### **A Patchwork of Programs**

Take the case of a 19-year-old woman with three children under 4 years of age, no automobile or telephone, living in a rural town in south central Idaho. She must walk through the snow for 40 minutes with her small children in tow to get to the health and welfare office, since public transportation is virtually nonexistent. Once she arrives, she is likely to be told that she can't be served until she has her pregnancy medically verified. To get the necessary pregnancy test, she must see a physician.

But physicians in the area are over-loaded and will take no new clients, especially those without a funding source. She gets an appointment to have her pregnancy diagnosed by the health district's family planning clinic in 2 weeks.

In 2 weeks, she makes the same arduous trip with her three children, is given the pregnancy test and told that she is eligible for the Women, Infants, and Children (WIC) food supplement of the U. S. Department of Agriculture, but she must make another appointment to return 2 weeks later to get certified for that program. She is also told that although she is eligible for the State health department's comprehensive prenatal program, funded by the Federal Maternal and Child Health Block Grant (MCH), all the slots are filled. Besides, she would not have been able to get transportation to the centralized health department clinic which is 50 miles away.

If she returns to the State health and welfare office 2 weeks later to complete her application for Medicaid, she may find that she has forgotten one proof of income verification and must make an-

other appointment to complete the plethora of paperwork. When her Medicaid application is finally complete, she must wait another 45 days to receive her eligibility determination, enabling her to try finding a physician who is willing to take her. Then she discovers that none of the physicians in the area are accepting medical cards for prenatal care, especially not those of patients who, like her, are already 7 months pregnant. Her only option is to go without prenatal care and simply to drop in at the hospital for delivery.

Statistics show that her child will be three times more likely to be low birth weight and much more likely to die before its first birthday than will those whose mothers have received prenatal care (1).

### **Problems of Hands-On Health Providers**

Those in the front line of health care delivery deal with this kind of scenario daily. What excuse can the coordinator of the health district prenatal care program offer for turning away the applicant just described? The coordinator's Maternal and Infant Care Program (MIC) for medically high-risk, low-income women has been shown to have a positive impact on infant mortality (3). Yet she can only serve 48 women a year because of limited funding and physician participation. In addition, she can seldom serve women in outlying counties because of the long distances they must travel.

In a well-intentioned attempt to serve more women, the State changes the rules for service delivery so that the coordinator's program now includes all low-income women (less than 185 percent of the Federal poverty level of income), not just those who are high risks medically. But—"Catch 22"—under the new rules, the coordinator's program can no longer serve the poorest women (those who are Medicaid-eligible) because, in theory, they have a funding source and presumably can gain access to prenatal care from the private sector. The reality is that few if any private physicians in the coordinator's eight-county service area are accepting Medicaid patients. Physicians complain of low reimbursement or none, high liability concerns, and patients' time-consuming psychological and social problems.

The situation worsened in 1989 as the Federal Office of Budget Reconciliation Act (OBRA) mandated expansion of Medicaid eligibility for pregnant women to 75 percent of the poverty income level. Ironically, with even more women Medicaid-eligible, fewer can gain access to care.

Meanwhile, the name of the State program has

been changed. It is no longer called the Maternal and Infant Care Program but the Improved Pregnancy Program (IPP). Actually, there is no program since the two contracting obstetricians, who had previously served 48 women a year, have quit. The co-ordinator's job description places her in the unethical position of promoting the importance of prenatal care while having to turn away the low-income women who apply for it.

This was the situation in Public Health District V, South Central Idaho, in the fall of 1988. Only 63 percent of the pregnant women in the district were entering prenatal care during their first trimester, compared with 72 percent in the rest of the State. And the district also had the highest rate of low birth weight infants, 6.6 percent compared with 5.1 percent in the rest of Idaho (4).

### **Piecing Together a Decentralized Program**

In District V, the lack of resources, normally the bane of rural communities, may have worked to some advantage. District personnel felt compelled to negotiate with other local service providers to pool the few resources available and to coordinate Federal programs at the front-line level.

First, the health district authorized the coordinator of the recently defunct MIC Program to take the initiative. In the fall of 1988 she set up community meetings with each of the five area hospitals. The participants included representatives of the Community Migrant Health Clinic and other interested agencies, as well as physicians and public health nurses.

Second, the district offered to serve as initial access point and clearinghouse for the prenatal care system. It identified four of its county offices as locations for decentralized care sites. One screening appointment replaced the eight attempts at access.

Third, public health nurses, who now met their pregnant clients at the screening appointment, were trained to do pre-natal intake assessment and case coordination, since the program coordinator could no longer handle the increasing caseload.

Fourth, the 1988 federally mandated Medicaid expansion at last provided reimbursement for prenatal support services, which had been so effective in the defunct MIC Program. District V could give comparable services under the two disjointed funding sources—Medicaid and the MCH Block Grant. The program coordinator organized the many appointments clients often need with nurses, nutritionists, social workers, and dental hygienists into a

monthly one-stop shopping appointment held at the decentralized clinics.

Fifth, the WIC Program that provides food supplements and nutrition education to low-income pregnant and breast-feeding women and to children through age 4 was also available at the same four local health department offices. The pregnancy program coordinator had already identified WIC as an untapped resource. Numerous studies have shown that women who participate in WIC have better pregnancy outcomes than those who do not (1,2,5). Since WIC was already utilized by most of the target population and administered by health districts in Idaho, District V decided to combine the WIC clinics with its one-stop-shopping support clinics. Not only would this save the client one appointment trip a month, but WIC food vouchers would provide additional incentives to participate in the prenatal support service clinics.

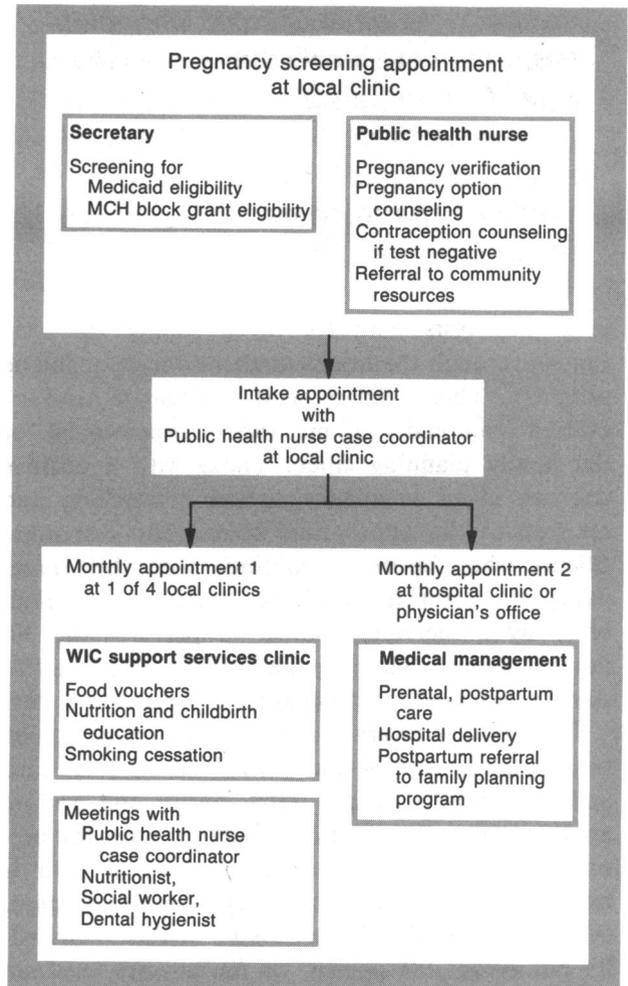
Sixth, the pregnancy program coordinator assured physicians that low-income pregnant clients would now arrive prescreened for Medicaid, freeing physicians from "upfront hassles" and insuring payment. County hospitals and physicians were ready to cooperate. They were alarmed by the growing number of women dropping in for delivery without prenatal care. They were also aware that these drop-ins would increase now that Health District V's MIC Program was defunct. Family practitioners were threatening to quit obstetric practice because the drop-ins were exceeding the 40-procedure limit on their malpractice insurance.

Seventh, to address the malpractice crisis, two of the five county hospitals began covering the liability insurance premiums for family practice physicians. Most of the others gradually followed, thus overcoming the barrier of physician unwillingness to serve.

A recent study at the University of Washington on access to prenatal care in rural areas shows that programs that maintain local availability of obstetrical care may improve perinatal outcomes in a "cost effective fashion . . ." (6).

The district pregnancy program coordinator assured physicians that the burden of providing medical management and of delivering these low-income clients would now be divided evenly. Physicians most willing to serve would no longer be overburdened, as had happened in the past. By January 1989, all 35 physicians offering obstetrical services in District V had agreed to participate in the new pregnancy program. During 1989, one hospital organized an in-house clinic to provide prenatal care to its patients. But the regional

## Idaho Public Health District V pregnancy program



medical center (RMC) contracted with the federally funded Community Migrant Clinic (CMC) to have CMC physicians and nurse practitioners provide prenatal care to the RMC's low-income patients. The RMC's private physicians then provided delivery service on a drop-in basis.

### Public Health District V Pregnancy Program

In the new program, clients receive comprehensive prenatal care services in their county of residence. They participate in two appointments a month—one for WIC and support services at the four newly decentralized public health clinics, and one for medical care with a physician or nurse practitioner at the local hospital or the physician's office (see chart).

**Pregnancy screening appointment.** At the nurse-managed pregnancy screening clinics, clients receive

*'In District V, the lack of resources, normally the bane of rural communities, may have worked to some advantage. District personnel felt compelled to negotiate with other local service providers to pool the few resources available and to coordinate Federal programs at the front-line level.'*

pregnancy tests paid for on a sliding fee scale funded through the health district's family planning program. Those clients with a negative test are offered foam and condoms and an appointment for the family planning clinic. Those with a positive test are given pregnancy option counselling and referred to the appropriate community resources. Clients who choose to continue with their pregnancy are screened for Medicaid presumptive eligibility by a secretary trained to perform the 30-minute process. This procedure allows Medicaid to pay for many of the pregnancy tests done that day.

The clinic secretary further helps eligible women begin paperwork for the permanent medical card and telephones to make initial health and welfare appointments. Presumptive eligibility pays for prenatal care while the permanent medical card is being processed, which can take as long as 45 days. Women whose incomes are above Medicaid eligibility but below 185 percent of the poverty level are offered maternal block grant funding for prenatal care if it is available. All women are referred to their private physicians for medical prenatal care. But if they have none or if the physician is unwilling to take medical cards, the clients are given appointments with their county public health nurse for intake into the District V Pregnancy Program.

**Intake appointment.** Once the client is accepted into the program, she is given an intake appointment with a public health nurse in her own locality. The nurse performs the initial risk assessment, medical-social history, screening for substance abuse, and health promotion counselling. The nurse-coordinator sets up the two monthly appointments for support services and medical care and facilitates their staffings and exchange of progress notes.

**Monthly appointment 1—WIC and support services.** The nurse-case coordinator meets monthly

with the client, arranging at least one home visit during pregnancy to assess home environment and one after delivery to assess the health of the mother and child. If the child or the family, or both, prove to be high risk, the same nurse may follow them under the health district's Child at Risk Program. A 4-year study at the University of Rochester, NY, School of Medicine found that mothers who were visited at home by nurses had healthier pregnancies with fewer complications and preterm deliveries than did the control group (7). The nurse-coordinator sees that the clients with temporary presumptive eligibility funding follow through with the paperwork for permanent medical cards.

Another important area facilitated by the nurse-case coordinator is family planning. Contraception education is stressed throughout the pregnancy. Sterilization counseling is offered if requested and post-partum tubal ligations arranged. Recently, nurse-case coordinators have begun providing foam and condoms on request at the post-partum home visit.

The client's nurse-coordinator augments the education given in WIC nutrition classes and sees the client before or after classes; she also arranges meetings the same day with support services (listed in chart). Classes are taught by WIC clinical assistants of the same socioeconomic status as the clients. Research has shown that such teachers have greater credibility with poor women than do most professionals (8).

The pregnancy program coordinator has rewritten material for the nutrition classes to create six separate childbirth information classes on (a) pregnancy changes, discomfort, warning signs; (b) breast or bottle feeding; (c) breast feeding; (d) labor and delivery; (e) the newborn; and (f) post-partum and contraception. Lamaze delivery techniques are included in each class.

Clients with pregnancies of similar gestational age are also grouped together to provide peer support. Self-help techniques include self-weighing and charting and keeping pregnancy diaries. The Smoking Cessation in Pregnancy Program (SCIP) is also included for those who need it. District V's SCIP Program has shown a 25-percent quit rate which compares well with the 14-percent average quit rate among low-income women in the United States (9).

**Monthly appointment 2—medical management.** Low-income clients arrive at the physician's office pre-screened for Medicaid payment and with support service needs under some control. The physi-

cian or a staff member can call the nurse-case coordinator about problems of compliance and need for support services.

**Program design and coordination.** The health department takes responsibility for ongoing coordination of the program. The pregnancy program coordinator conducts quarterly audits at each clinic site, collects outcome data, and generates reports. She conducts periodic meetings at each clinic site with representatives of participating agencies and physicians, and updates them on changes in Medicaid or other funding sources that would affect the program.

The coordinator is also planning to incorporate the following services into the program:

1. Vouchering systems for transportation and child care at appointment times.
2. Enhanced substance abuse screening and referral in conjunction with Community Migrant Health Clinics.
3. Special curriculums to fit the sociocultural needs of the Hispanic and teenage clients.

### Enriching the Public Health Nurse Job

To make the program work, the new pregnancy program's components had to be integrated into the duties of the public health nurse. In redesigning the nurse's responsibilities, the coordinator consulted with Dr. Frederick Herzberg, Distinguished Professor of Management, at the University of Utah. Dr. Herzberg warned that the case management strategy of giving the client one contact point would not be effective unless nurses were given control of the resources and other necessary job enrichment ingredients. Nurses, like other workers, resent being held accountable unless they have sufficient authority to communicate and schedule and sufficient direct feedback on outcomes (10).

Enriching the job of the overworked public health nurse requires not more but better work. In the old MIC model, the nurse could barely manage to see clients twice in pre- and postpartum home visits. These were difficult to arrange and frustrating, since the prenatal home visit was usually the nurse's first introduction to the client, and the postpartum visit so often presented the nurse with the results of lack of adequate prenatal care—the low birth weight baby.

The new pregnancy program model requires 8 to 10 hours a week of the nurse's time. That also includes staffing and charting time. It is broken down into one 2-hour intake appointment, two

2-hour home visits, and one or two support service clinics each month of 6 hours each. Nurses schedule intake appointments and home visits at their own and their clients' convenience.

<i>Nurse duties</i>	<i>Old MIC model</i>	<i>New PP model</i>
Case coordination	1 centralized program coordinator	10 public health nurse case coordinators in 4 decentralized clinics
Intakes per	4	3-4 each public health nurse = 30-40 per month for the program
Active caseload	30	20-30 each public health nurse
Clients served	63 women 1988	171 women 1989 303 women 1990

Anecdotal notes from the nurse-case coordinators indicate satisfaction with their jobs in the new program and relate to the ingredients of a good job.

#### 1. Client relationship

"It's great.. it's why I like my job. It allows you time to develop rapport with the woman and her family so that you can be responsive to their needs and desires, not just to some established protocol."

". . .the clients like it better because they only have to tell their story once to one person."

#### 2. New learning and unique expertise

"You can individualize plans of care and education—continuity of care is promoted."

". . .the clients seem to like the new program so much better and identify you and the health department as a resource down the road."

#### 3. Direct feedback

"I get to work with the family long enough to see positive outcomes."

#### 4. Direct communications authority

"The program sells itself - even with the doctors. They're talking and working with us now where they weren't before."

#### 5. Control of resources

"We are actually getting health department personnel, Department of Health and Welfare eligibility, hospital personnel and doctors are actually talking and meeting each other face to face. People are putting faces to names and the result is improved service delivery."

#### 6. Self-scheduling

"Saves time with one-stop shopping for the

## **Public Health Nurse Case Coordinator Prenatal Care System Core Job**

- Client advocacy
- Sterilization counseling and scheduling, if desired
- Scheduling of medical and support service clinic appointments
- Followup of at-risk infants in child-at-risk program
- Ongoing risk assessment
- Facilitation of transportation and child care
- Health promotion
- Hospital preregistration
- Home visits
- Referral to community resources

clients and the nurse. It's so much better to meet the client on day one of the program and interact with them until program discharge."

### **7. Accountability**

"You already know the client when you go on the home visit and can be more effective in your assessment and intervention."

In a recent lecture to the Free University of London on motivation in the health care services, Dr. Herzberg suggested that restructuring of health care services for greater motivation and efficiency should begin by enriching the core duties of the public health nurse (11).

At the heart of the new pregnancy program is the public health nurse-case coordinator. She is already out there in the community, established as a resource person to the client. Especially in rural areas, she has hands-on knowledge of community programs, finances, and personalities and can coordinate solutions to problems inside and outside the home. She has knowledge both of medical and social needs of the client and can serve the family before, during, and after pregnancy (12,13).

Herzberg explains that when the core job of the organization is enriched through giving responsibility for total client needs, the job can then feed back into the system improved support and service to the client (10). Such job enrichments usually result in improved efficiency, quality, productivity, and job satisfaction (14).

Certainly enrichment of the nurse's job had an effect on WIC clinical assistants. They reported greater satisfaction teaching nutrition classes be-

cause clients "seem more interested and participate more now that they are divided into different pregnancy groups with the new material aimed at their problems." A client poll conducted in 1989 revealed high satisfaction with the quality of these WIC classes.

Efficiency has improved by having client certification for the WIC Program begin at the pregnancy program intake appointment, saving time and paperwork for the program and saving an additional appointment for the client. Productivity has been improved, with 200 more pregnant women being served by the WIC program in 1989 than in 1988 as a result of pregnancy program referrals.

Incorporation of the WIC Program with its incentives for attendance—food vouchers and nutrition classes—is helping keep participation and attendance at support services high.

Pregnancy screening for clients and job enrichment for the public health nurses have also fed back into the medical care system, facilitating obstetrical care.

District V did presumptive eligibility screening for 150 pregnant women under its new program in 1989. In 1990, 422 women received this service. Physicians are assured of equal distribution of low-income clients, and only care for those from their own counties. This decentralization appeals to the strong rural idea that "We take care of our own." Before the changes, tempers were rising as physicians and hospitals encouraged low-income women to cross county lines to other facilities for care and delivery. Efficiency is also improved after the woman delivers. The physician's 6-week postpartum examination now serves as the initial examination for clients in the district's Family Planning Program.

Savings in duplications of services are just beginning to be realized. The most important efficiencies and reductions in stress, however, are being realized by low-income women. They now have only two regular appointments a month and these in much more accessible locations. They no longer have to struggle alone through a crazy quilt of prenatal programs.

### **Promising Indicators**

It is too early to see a trend, but "Idaho Vital Statistics" reports a drop in District V low birth weight infants from 6.6 percent in 1988 to 6.1 in 1989 and 5.6 percent in 1990 (15). In addition, the regional medical center experienced a decrease in drop-in deliveries. In 1989 there were 170. In 1990,

there were only 70. Yet total deliveries were slightly more numerous—1,179 deliveries in 1990, 1,156 in 1989.

Even more encouraging, the medical center data indicate that very low birth weight babies (less than 1,500 grams) decreased by 50 percent from 1989 to 1990, and there was a decrease of 1,000 newborn intensive care unit days for an estimated savings of \$300,000 (16).

## Conclusion

The new pregnancy program is having positive effects on access to prenatal care in Health District V. During the first year of its development and operation, the program served 176 clients, almost three times the number of pregnant women as in the previous year. In 1990, this figure again increased significantly to 303. Since a fifth pregnancy testing and support services clinic was added in December 1990, the district estimates that it will serve at least 400 women in 1991.

But the program has reached its limits. State Medicaid reimbursement for support services does not cover costs. Without increased reimbursement, the health district can't hire the additional staff members needed to provide services to all Medicaid-eligible women. Additionally, physicians are requesting health department services for pregnant women with private insurance who need the additional support services not covered by their carrier. Most industrialized countries provide such support services, realizing that good prenatal care is cost-effective in both monetary and human terms.

Failure to provide adequate prenatal care for women in the United States is well known (17). In spite of spending more per person for prenatal care than does any other industrialized nation, the United States ranks 20th in infant mortality (18). Several studies have identified institutional barriers against access to prenatal care as a major cause of this failure (19,20). The District V Pregnancy Program has tried to overcome some of these barriers. A recently published Public Health Service report, "Caring for Our Future: The Content of Prenatal Care," appears to validate the strategies already applied in this program (21).

"For prenatal care to be effective, it must be available and it must be used. The three basic components of prenatal care are (1) early and continuous risk assessment, (2) health promotion, and (3) medical and psychosocial interventions and

followup. . . One prenatal care provider should be in charge of and coordinate the team providing each woman's prenatal care."

District V's new pregnancy program shows that hands-on health care providers can piece together a model that works.

## References . . . . .

1. Preventing low birth weight. Division of Health Promotion and Disease Prevention, Institute of Medicine. National Academy Press, Washington, DC, 1985.
2. Access to prenatal care: key to preventing low birth weight. Report of Consensus Conferences, American Nurses Association. Kansas City, MO, 1987.
3. Brown, S., editor: Prenatal care: reaching mothers, reaching infants. Division of Health Promotion and Disease Prevention, Institute of Medicine. National Academy Press, Washington, DC, 1988.
4. Idaho vital statistics 1988. Idaho Bureau of Printing, Boise, 1988, pp. 28-32.
5. New report on WIC highlights program benefits. Center on Budget and Policy Priorities, Washington, DC, Feb. 20, 1986.
6. Nesbitt, T., Connell, F., Hart, L., and Rosenblatt, R.: Access to obstetric care in rural areas: effect on birth outcomes. *Am J Public Health* 80: 817, July 1990.
7. Home visiting: opening doors for America's pregnant women and children. National Commission to Prevent Infant mortality. Washington, DC, July 1989.
8. Juarez and Associates, editors: Healthy mothers market research black and Mexican-American women. Department of Health and Human Services, Public Health Service, contract no. 282-81-0032. Washington, DC, September 1982.
9. Bibliography of selected intervention programs for smoking cessation during pregnancy. Public Health Service. U.S. Government Printing Office, Washington, DC, 1987.
10. Herzberg, F.: Motivation and innovation : who are workers serving? *California Management Rev* 2: 60-70, winter 1979.
11. Herzberg, F.: Managing health services using motivation-hygiene theory. Taped lecture, the Open University of London. British Broadcasting Corp., London, December 1989.
12. Bushy, A.: Rural determinants in family health: considerations for community nurses. *Family Community Health* 12: 29-35 winter 1990.
13. Buescher, P., Smith, C., Holliday, J., and Levine, R.: Source of prenatal care and infant birth weight: the case of a North Carolina County. *Am J Obstet Gynecol* 156: 204-210, January 1987.
14. Herzberg F., and Miner, M.: Monitoring orthodox job enrichment. *Defense Management J* 16: 30-36 second quarter 1980.
15. Idaho vital statistics 1989. Idaho Bureau of Printing, Boise, 1989, pp. 28-32.
16. Perinatal data bank. Magic Valley Regional Medical Center, 650 Addison Ave., West, Twin Falls, ID 83303.
17. Hulbert, A.: Saving America's babies. *The New Republic*, Nov. 13, 1989, pp. 19-21.

18. Institute of Medicine: Science and babies. Academy Press, Washington, DC, 1990. p. 1
19. Blessed events and the bottom line: financing maternity care in the United States. Alan Guttmacher Institute, New York, 1987.
20. Miller, C., Margolis, L., Schwethelm, B., and Smith, S.: Barriers to implementation of a prenatal care program for low-income women. *Am J Pediatr Health* 79: 62-64, January 1989.
21. National Institutes of Health: Caring for our future: the content of prenatal care. DHHS Publication No. (NIH) 90-3182. U.S. Government Printing Office, Washington, DC, 1989.

## Is Battered Women's Help Seeking Connected to the Level of Their Abuse?

RUTH REIDY, PhD  
MICHAEL VON KORFF ScD

Dr. Reidy is with the Department of Sociology, University of Washington. Dr. Von Korff is with the Center for Health Studies, Group Health Cooperative of Puget Sound, Seattle, WA.

Dr. Richard Coughlin and Dr. Art St. George of the University of New Mexico in Albuquerque contributed the use of computer facilities.

Tearsheet requests to Dr. Ruth Reidy, 504 Sandia Road, N.W., Albuquerque, NM 87107.

### Synopsis .....

*A total of 289 abused women who sought assistance in several battered women's agencies*

*were interviewed. Of these abused women, 70 percent reported a delay of more than a year in seeking help from the agency, even though many of them reported having experienced severe or life threatening abuse.*

*There was no association between the severity of abuse and the time lapsed in seeking help from an agency, indicating that women exposed to severe, life-threatening physical abuse frequently delay help seeking.*

*Increased attention to barriers to help seeking among battered women and approaches to increasing the accessibility of services for battered women seem warranted.*

SINCE THE MIDDLE 1970s, considerable attention has been given by researchers, policy makers, and the media to the social problem of violence in the home. Recent initiatives of the Surgeon General and the Attorney General's Task Force have identified domestic violence as a serious public health problem (1,2).

Wife assault, in particular, represents a major source of injury to women in America (1,2). It often occurs over prolonged periods (3), and it appears to be a more common cause of injury to women than automobile accidents, muggings, and rapes combined (4). Wife assault results in greater physical damage to victims than assault by strangers (5). Estimates of the proportion of women who have experienced serious physical abuse at least once by their intimate partners range from 15 to 70 percent (3,6). A more recent report (7), using Federal Bureau of Investigation data from 1976 to 1987, found that 34 percent of all female homicide

victims older than 15 years were killed by their husbands or intimate partners.

The growing public awareness of this problem has not been matched by reliable data on improved methods of intervention to ameliorate chronic patterns of domestic violence in many American households. In particular, there is little known about battered women's delay in seeking help. Some claim that studies of battered women's help seeking is one of the important priorities for domestic violence research in the 1990s (8).

Much of the research on battered women has focused on clinical populations—women who have sought help in various therapeutic support agencies such as shelters or group therapy programs (9). Little attention, however, has been paid to women's help-seeking behavior, including the factors related to contact with helping agencies (8).

Our study focuses on the relationship of categories of physical abuse and delay before contact with